



DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2017-0035; Notice 2]

Ride the Ducks International, LLC, Denial of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Denial of petition.

SUMMARY: Ride the Ducks International, LLC (RTDI), has determined that certain model year (MY) 1996-2014 Ride the Ducks International Stretch Amphibious passenger vehicles (APVs) do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 103, *Windshield Defrosting and Defogging Systems*. RTDI filed a noncompliance information report dated March 15, 2017. RTDI also petitioned NHTSA on April 12, 2017, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety.

ADDRESSES: Neil Dold, Office of Vehicle Safety Compliance, NHTSA, telephone: (202) 366-7352, facsimile (202) 366-5930.

SUPPLEMENTARY INFORMATION:

I. Overview:

RTDI has determined that certain MY 1996-2014 Ride the Ducks International Stretch APVs do not fully comply with paragraph S4.1 of Federal Motor Vehicle Safety Standard (FMVSS) No. 103, *Windshield Defrosting and Defogging Systems* (49 CFR 571.103). RTDI filed a noncompliance information report dated March 15, 2017, pursuant to 49 CFR 573, *Defect and Noncompliance Responsibility and Reports*. RTDI also petitioned NHTSA on April 12, 2017, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, for an exemption from

the notification and remedy requirements of 49 U.S.C. chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety.

Notice of receipt of RTDI's petition was published in the Federal Register (82 FR 38992) with a 30-day public comment period, on August 16, 2017. No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at: <http://www.regulations.gov/>. Then follow the online search instructions to locate docket number "NHTSA-2017-0035."

II. Vehicles Involved:

Approximately 105 MY 1996-2014 RTDI Stretch APVs, manufactured between January 1, 1996 and December 31, 2014 are potentially involved.

III. Noncompliance:

RTDI explained that the noncompliance is that the subject vehicles were manufactured without a windshield defrosting and defogging system, as required by paragraph S4.1 of FMVSS No. 103.

IV. Rule Requirements:

Paragraph S4.1 of FMVSS No. 103 includes the requirements relevant to this petition. Each vehicle shall have a windshield defrosting and defogging system.

V. Summary of RTDI's Petition:

As background, in 1996, RTDI began to produce APVs by performing extensive modifications to General Motors amphibious military trucks originally designated as DUKWs. The ability of the DUKW to transport troops, supplies or equipment across both land and water made them indispensable in World War II and the Korean War. The modifications performed by RTDI, which included replacement of the original drivetrain and enlarging the hull or body, were such that the end product was a newly manufactured vehicle employing donor parts. The original APVs are based on military vehicles that were capable of operation over both land and water. The resulting "Stretch Duck" APVs were manufactured by RTDI until 2005 when RTDI

introduced its “Truck Duck” APVs. The Truck Duck APVs are based on military cargo vehicles. Both the Stretch Duck and Truck Ducks were manufactured in accordance with state and U.S. Coast Guard rules and regulations. RTDI has not manufactured any vehicles since 2014.

RTDI described the subject noncompliance and stated its belief that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, RTDI submitted the following reasoning:

1. FMVSS No. 103 specifies that “[e]ach vehicle shall have a windshield defrosting and defogging system.” 49 CFR 571.103, S4(a), S4.1. The purpose of FMVSS No. 103 is to establish minimum performance requirements for vehicle windshield defrosting and defogging systems in order to ensure that the vehicle operator is able to sufficiently see through the windshield.

The APVs have features that are designed to achieve the same purpose as the standard. The APVs’ “open-air” design precludes fog from building up on the windshield. Fog buildup on the interior or exterior of a motor vehicle windshield occurs when water condenses on the windshield. For water to condense on a windshield, the air next to the windshield must be humid and the air’s dew point – the temperature to which air must be cooled to become saturated with water vapor – must be higher than the windshield’s temperature. In other words, humid and warm air must surround a cool windshield. Because of its open-air design, the APVs will not encounter any of the physical conditions that create fog buildup on the windshield. The APVs do not have solid glass windows in the passenger compartment and the rear of the vehicle is also open to the air. The side panels of the driver’s compartment are open on both sides of the windshield and the center windshield can be pushed outward and opened when needed. Because of the APVs’ design, the ambient air is able to continually circulate within the interior of the vehicle, creating no difference between the temperature or humidity of the air

outside and inside the vehicle. In the unlikely event that fog did accumulate on the windshield, the APVs have windshield wipers to clear the surface and the vehicle operator can also push down the windshield for visibility.

2. Frost builds up on the windshield of a vehicle when the temperature of liquid or condensation on the windshield decreases to the freezing point of water, turning the condensation into frost. The APVs' lack of a defrosting system similarly does not present a safety concern. The APVs are only operated on a seasonal basis and not during the winter months in any location where the vehicles provide tours. The APVs, therefore, are not operated during or exposed to weather conditions that would expose the vehicles to frost or create the need to defrost the windshields. As above, the operator also has the ability to push down the center windshield or use the windshield wipers to increase visibility in the unlikely event of frost.
3. From its inception, the Safety Act has included a provision recognizing that some noncompliances may pose little or no actual safety risk. The Safety Act exempts manufacturers from their statutory obligation to provide notice and remedy upon a determination by NHTSA that a noncompliance is inconsequential to motor vehicle safety. *See* 49 U.S.C. 30118(d). In applying this recognition to particular fact situations, the agency considers whether the noncompliance gives rise to "a significantly greater risk than...in a compliant vehicle." 69 FR 19897, 19900 (April 14, 2000). As described above, the specialized design of the APVs and the vehicles' pattern of use does not expose the vehicles to conditions that could create an increased safety risk when compared to a vehicle that has a windshield defrosting and defogging system installed.

RTDI concluded by expressing the belief that the subject noncompliance is inconsequential as it relates to motor vehicle safety, and that its petition to be exempted from

providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VI. Supplemental Information:

On October 10, 2017, RTDI, per a request from NHTSA's Office of Chief Counsel, provided the following supplemental information:

Regarding FMVSS No. 103, RTDI asserted that:

1. The subject vehicles are equipped with heaters but not air conditioning. There are two types of heating systems used, depending on the type of vehicle.
 - a. For "Stretch Duck" APVs, heaters are located at the base of the passenger compartment side walls, with one heater located on each side. The heaters run lengthwise, from the front to the back of the vehicle's interior compartment. The heaters are radiant type heaters that utilize coils that are plumbed into the engine's water coolant system. Small blowers are located at one end of each heater box that force the radiant heat towards the passenger seated next to the exhaust vents.
 - b. The "Truck Duck" APVs use heaters with a similar design (plumbed into the engine's coolant system), however, there are two smaller heaters with larger blowers. These heaters are located under the left and right centermost passenger seats.
2. Due to the excessive ventilation of the passenger space (even when curtains are down) when the heaters are operational, they are not capable of maintaining an increased ambient temperature within the passenger space. Frost and fog cannot build on the surface of the vehicle windshield without a difference between the ambient temperature in the passenger compartment and the outside air.
3. The interior space of the vehicle is under constant ventilation due to the configuration of the engine's reverse radiator fan, the various canopy openings, and the passenger deck design. The APVs are considered an "open boat" design under the U.S. Coast Guard

regulations. Per the regulations, the deck of an open boat must be capable of draining any accumulation of water directly to the bilge pumps which are located below the deck. *See* 46 CFR 178.440. Additionally, U.S. Coast Guard regulations require spaces containing machinery powered by fuel to have ventilation. *See* 46 CFR 182.460. To comply with this regulation, the engines reverse radiator fan continuously draws air through the vessel's deck and ventilation piping towards the radiator. The engine's radiator fan exhausts the air through the vehicle exterior side vents located adjacent to the driver station.

4. RTDI claimed that the design of the APVs and the vehicles' use pattern precludes the accumulation of frost and fog on the windshield. RTDI asserted that this is consistent with the on-road experience of the APVs. Generally, the vehicles do not operate during the cold weather. In the event that fog or frost did accumulate on the front windshield, the driver would be able to quickly and easily lower the windshield. RTDI has established operational safety guidelines for the use of the drivers open/close feature. RTDI's guidelines states that an operator should not open the windshield "unless the visibility through the windshield becomes obstructed, the opening and closing of the front windshield should only take place when the vehicle is traveling at a slow rate of speed (i.e., slow-moving traffic conditions) and/or when the vehicle comes to a complete stop."
5. The vehicles are equipped with clear PVC soft side curtains that can be lowered and raised by the driver. The side curtains' operational controls are located on the driver's dash and are operated by using two momentary switches (one switch operates the left side curtain and the second switch operates the right side curtain). When the operator holds the switch down the curtains will lower and when the switch is held up the curtain will raise. The curtains have limit switches that automatically stop the curtains once they reach a height of not less than 32". This height restriction is consistent with U.S. Coast Guard requirements for means of escape which provides the "minimum clear opening

must be not less than 32 inches.” 46 CFR 116.500. As a safety precaution, RTDI installed red markers on the canopy uprights to provide the APV operator with a visual means to ensure the limit switches are properly set and have reached the 32” placement. Additionally, the U.S. Coast Guard inspects and tests the curtain safety feature annually.

6. The curtains are generally lowered due to inclement weather conditions. It takes the driver less than 30 seconds to lower the curtains. The side curtains do not enclose the entire passenger’s space; only the left and right sides of the passenger compartment are enclosed by the side curtains. In the event of an emergency, the driver can deploy the side curtains from the driver's station to allow for quick egress. Passengers are also able to lift and push curtains out in the event of an emergency.

VII. NHTSA’s Analysis:

NHTSA has considered RTDI’s arguments and has determined that RTDI has not met its burden of demonstrating that the subject noncompliance is inconsequential. The Agency responds to RTDI’s arguments below.

The burden of establishing the inconsequentiality of a failure to comply with a *performance requirement* in a standard—as opposed to a *labeling requirement*—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.¹ Potential performance failures of safety-critical equipment, like seat belts or air bags, are rarely deemed inconsequential.

An important issue to consider in determining inconsequentiality based upon NHTSA’s prior decisions on noncompliance issues was the safety risk to individuals who experience the type of event against which the recall would otherwise protect.² NHTSA also does not consider

¹ Cf. *Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

² See *Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); *Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance*, 78 FR 46000 (July 30, 2013) (finding

the absence of complaints or injuries to show that the issue is inconsequential to safety. “Most importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be safety issues in the future.”³ “[T]he fact that in past reported cases good luck and swift reaction have prevented many serious injuries does not mean that good luck will continue to work.”⁴

Arguments that only a small number of vehicles or items of motor vehicle equipment are affected have also not justified granting an inconsequentiality petition.⁵ Similarly, NHTSA has rejected petitions based on the assertion that only a small percentage of vehicles or items of equipment are likely to actually exhibit a noncompliance. The percentage of potential occupants that could be adversely affected by a noncompliance does not determine the question of inconsequentiality. Rather, the issue to consider is the consequence to an occupant who is exposed to the consequence of that noncompliance.⁶

For safe viewing through the front windshield, FMVSS No. 103 specifies requirements for windshield defrosting and defogging systems. These systems are critical for removing and preventing frost and ice from the windshield during cold weather seasons, or fog anytime the ambient temperature, humidity and dew point are at the required combination between the windshield and the air inside or outside of the vehicle.

occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

³ *Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21666 (Apr. 12, 2016).

⁴ *United States v. Gen. Motors Corp.*, 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it “results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future”).

⁵ *See Mercedes-Benz, U.S.A., L.L.C.; Denial of Application for Decision of Inconsequential Noncompliance*, 66 FR 38342 (July 23, 2001) (rejecting argument that noncompliance was inconsequential because of the small number of vehicles affected); *Aston Martin Lagonda Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 41370 (June 24, 2016) (noting that situations involving individuals trapped in motor vehicles—while infrequent—are consequential to safety); *Morgan 3 Wheeler Ltd.; Denial of Petition for Decision of Inconsequential Noncompliance*, 81 FR 21663, 21664 (Apr. 12, 2016) (rejecting argument that petition should be granted because the vehicle was produced in very low numbers and likely to be operated on a limited basis).

⁶ *See Gen. Motors Corp.; Ruling on Petition for Determination of Inconsequential Noncompliance*, 69 FR 19897, 19900 (Apr. 14, 2004); *Cosco Inc.; Denial of Application for Decision of Inconsequential Noncompliance*, 64 FR 29408, 29409 (June 1, 1999).

RTDI stated that without a windshield defrosting and defogging system the features of the APVs are designed to achieve the same purpose as the requirements in FMVSS No. 103. RTDI explained that the APVs are “open-air” (i.e. without side and rear glass windows) and because of this will never encounter any physical conditions that would produce fog buildup on the windshield. RTDI explained, that in the unlikely event that fog did accumulate on the windshield, the APVs have windshield wipers to clear the surface and that the vehicle operator can also manually lower the windshield for better visibility. RTDI mentioned that frost and ice should not be an issue because the APVs are only operated on a seasonal basis and not during winter months in any of the locations they operate.

In a separate inquiry to RTDI, the Agency learned that APVs are equipped with plastic side windows that can be deployed to partially enclose the vehicle’s interior during periods of inclement weather and that these vehicles are not equipped with air conditioning systems but are designed with interior heating units.

The Agency does not agree with RTDI’s judgment that the subject APVs, designed without a defogging or defrosting system, achieve the same purpose as FMVSS No. 103. During times of inclement weather when the side curtains are deployed and the front windshield is in the up position, the vehicle is not in a fully “open-air” configuration as suggested by RTDI. If fog were to develop on the windshield, and the vehicle is being driven on public roadways at posted speeds, the driver would not be able to safely lower the front windshield to address the problem, as explained by RTDI. Furthermore, RTDI mentioned that the APVs are only operated on a seasonal basis and not during winter months, however, the vehicles were designed with heating systems which would suggest they can be operated at times when the outside temperature is too cool for passenger comfort or when or frost conditions may occur. In all events, RTDI has not provided sufficient information for NHTSA to determine that the conditions underlying the regulatory requirement at issue will not occur during operation of the subject APVs.

NHTSA notes that FMVSS No. 103 was amended in 1985 to explicitly provide in §4(b)

that passenger cars, multipurpose passenger vehicles, trucks, and buses manufactured for sale in the non-continental United States may, at the option of the manufacturer, have a windshield defogging system which operates either by applying heat to the windshield or by dehumidifying the air inside the passenger compartment of the vehicle, in lieu of meeting the requirements specified by paragraph (a) of this section (50 FR 48772, Nov. 27, 1985). While this section of FMVSS No. 103 does not apply to the RTDI vehicles at issue, the reasons for this amendment are relevant to RTDI's proffered rationale that vehicles operated only in warmer months need not have a windshield defogging system. The 1985 amendment was promulgated in response to a petition filed by an entity located in the Virgin Islands alleging that windshields in that locale fog up very badly in damp weather, creating a serious safety hazard in vehicles which do not have defogging systems. The petitioner requested that manufacturers be required to install defogging systems in passenger cars sold in the Virgin Islands. NHTSA reviewed the climatic conditions of the Virgin Islands as well as other non-continental areas of the United States and determined that the petitioner's claim that climatic conditions conducive to frequent windshield fogging were accurate. In these climes, fogging occurs when a cool windshield contacts warm, moist air and the water vapor in the air condenses in the form of a liquid on the windshield. NHTSA further found these areas to be characterized by high temperatures and high humidity and windshield fogging would be especially likely to occur in the morning hours.

Given the operating regime of the RTDI vehicles, where high humidity is likely to be encountered along with higher temperatures, NHTSA is concerned, that under some combinations of interior and exterior environmental conditions (i.e. air temperatures, humidity and dew point) fog could begin to build on the windshield. There are many factors, both inside and outside of the vehicle that can contribute to temperature, humidity and dew point variations, the root cause of fog. The human body gives off heat and is continually exhaling warm moist air which is a key contributor to the development of fog on internal motor vehicle windows. If an APV is fully loaded with passengers, the heater is activated because the temperature is cool

outside, and the side windows and front windshield are closed, these conditions could be cause for a fog build-up on a windshield. This situation could be exasperated if a rainstorm quickly passed by the location where an APV was operating, which dropped the ambient temperature rapidly and added moisture to the surrounding environment.

VIII. NHTSA's Decision

In consideration of the foregoing, NHTSA finds that RTDI has not met its burden of persuasion that the subject FMVSS No. 103 noncompliance in the subject vehicles is inconsequential to motor vehicle safety. Accordingly, RTDI's petition is hereby denied and RTDI is consequently obligated to provide notification of, and a free remedy for, that noncompliance under 49 U.S.C. 30118 and 30120.

(Authority: 49 U.S.C. 30118, 30120; delegations of authority at 49 CFR 1.95 and 501.8)

Joseph Kolly,

Acting Associate Administrator for Enforcement.

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